

## **DRY POWDER DOSE FILLING SYSTEMS AND RELATED METHODS**

### Abstract

Methods for flowably dispensing dry powders from a hopper having a  
5 dispensing port and a dry powder flow path can include: (a) generating a first non-  
linear vibration input signal, the first non-linear input signal comprising a plurality of  
different selected frequencies that correspond to a first dry powder formulation; (b)  
applying the first non-linear vibration input signal to a dispensing hopper having at  
least one dispensing port while the first dry powder formulation is flowing  
10 therethrough; and (c) dispensing a first metered quantity of the first dry powder through  
the dispensing port to a receiving member. Related devices and computer program  
products for dispensing dry powders are also described.